Amendment to the Claims:

This listing of claims replaces all prior versions, and listings, of claims in the application:

1-6. (Canceled).

7. (Previously presented) A process for making a catalyst ink for a fuel cell, comprising mixing, at room temperature, components comprising water, particles of a fluorocarbon polymer with a particle size of 1 to 4 microns, an ionomer which has a property of improving ion conduction, and a catalytic material including platinum and which are randomly spaced and uniformly mixed.

8. (Previously Presented) The process of claim 7, wherein the particles have a surface area of about 5 to about 10 m^2/g.

9. (Currently amended) The process of claim 7, wherein the catalytic material comprises ~~substantially~~ 60% platinum and 40% ruthenium.

10. (Previously Presented) The process of claim 7, wherein the fluorocarbon polymer is selected from the group consisting of polytetrafluoroethylene polymers and fluorinated ethylene-propylene polymers.

11. (Canceled)

12. (Currently amended) The process of claim [[11]]7, wherein the ionomer comprises a liquid copolymer of tetrafluoroethylene and perfluorvinyletherosulfonic acid.

13. (Currently amended) A process for making an electrode assembly for a fuel cell, comprising:

(a) providing a catalyst ink comprising water, particles of a fluorocarbon polymer with a particle size of 1 to 4 microns, an ionomer which has a property of improving ion conduction, and a catalytic material including platinum and another catalytic material, which are randomly spaced and uniformly mixed;

(b) preparing a substrate of carbon fiber paper, by adding fluoro[[-]]carbon polymer to the carbon fiber paper; and

(c) applying the catalyst ink at room temperature to at least one side of said substrate.

14. (Previously Presented) The process of claim 13, wherein the substrate has said fluorocarbon polymer as 5 wt %.

15. (Previously Presented) The process of claim 14, further comprising roughening the side of the membrane prior to applying the catalyst ink.

16. (Previously Presented) The process of claim 15, wherein the side of the membrane is roughened by contacting the membrane with an abrasive selected from the group consisting of silicon nitride, boron nitride, silicon carbide, silica and boron carbide.

17. (Previously Presented) The process of claim 16, wherein the abrasive has a grit size of about 300 to about 400.

18. (Previously Presented) A process comprising:

(a) providing a catalyst ink comprising particles of a fluorocarbon polymer with a particle size of 1 to 4 microns, an ionomer which has a property of improving ion conduction, and a catalytic material including platinum and another catalytic material, randomly spaced and uniformly mixed;

(b) applying the catalyst ink at room temperature to at least one side of a membrane;

(c) bonding the membrane to at least one electrode and using said membrane as a cathode of a direct methanol fuel cell.

19. (Previously Presented) The process of claim 18, further comprising roughening the side of the membrane prior to applying the catalyst ink.

20. (Currently amended) A fuel cell comprising:

a cathode having a membrane, a catalyst ink comprising particles of a fluorocarbon polymer with a particle size of 1 to 4 microns, an ionomer which has a property of improving ion conduction, and a catalytic material including platinum and another catalytic material, which are randomly spaced and uniformly mixed[[,]] and bonded to the membrane; and

at least one electrode; a solid polymer electrolyte membrane, bonded to said cathode, and an anode bonded to said solid polymer electrolyte membrane, said anode, cathode and solid polymer electrolyte membrane collectively forming a membrane electrode assembly.

21. (Previously Presented) A fuel cell as in claim 20, wherein said applying further comprises roughening said at least one side of the membrane prior to applying the catalyst ink.

22. (Previously Presented) A process as in claim 18, wherein said applying comprises roughening said one surface prior to applying the catalyst ink.

23. (Currently amended) A process as in claim 7, wherein ~~said~~ the ionomer is Nafion configured as an ion conducting material.

24. (Previously Presented) A process as in claim 13, wherein said ionomer is Nafion configured as an ion conducting material.

25. (Previously Presented) A process as in claim 18, wherein said ionomer is Nafion configured as an ion conducting material.

26. (Previously Presented) A fuel cell as in claim 20, wherein said ionomer is Nafion configured as an ion conducting material.